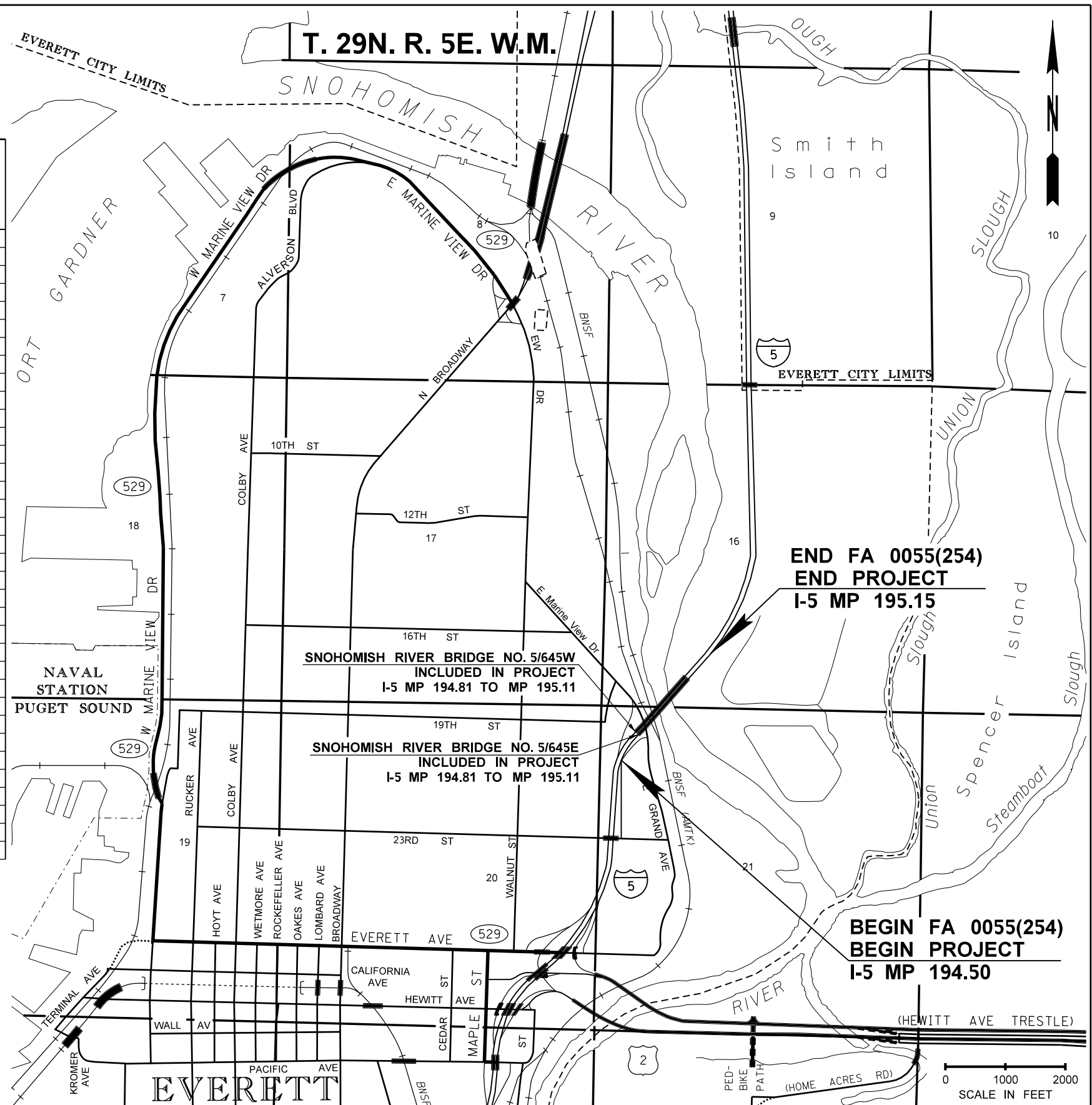


# INDEX


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	PLAN
	REFERENCE
	NO.
	SHEET
	OF
	SHEETS

NOTE: ALL SHEET REFERENCES, FIRST NOS. OF STRUCTURE CODE DESIGNATIONS  
AND MATCH LINE SHEET REFERENCES, ETC., THROUGHOUT THE PLANS,  
REFER TO THE ENTRY IN THE PLAN REFERENCE NUMBER BOX.

[illegible]

PROJECT LICENSED PROFESSIONAL CERTIFICATES

<div></div> <div>W. GREGORY HESS (Nov 22, 2022 14:49 PST)</div> <div>W. GREGORY HESS</div> <div>Nov 22, 2022</div> <div>AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.</div>	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.
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NOTES:

THIS PLAN SET WAS DEVELOPED ELECTRONICALLY UNDER THE DIRECT SUPERVISION OF THE LICENSED PROFESSIONALS THAT HAVE AFFIXED THEIR SIGNATURE TO THIS PAGE.

THIS SHEET SERVES AS THE CERTIFICATION BY THE ABOVE LICENSED PROFESSIONALS OF ALL SHEETS IN THIS PLAN SET WHERE THEIR STAMPS AND SIGNATURES APPEAR.


FILE NAME T:\412348\XL6330 - I-5 Sno R Br Painting\CAD\ContractPlans\XL6330_PS_01IN.dgn																		Plot 4	
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DATE	11/15/2022					10	WASH									CT1			
PLOTTED BY	walgame					JOB NUMBER		LOCATION NO.								SHEET 2 OF 20 SHEETS			
DESIGNED BY	E. WALGAMOTT					22A035													
ENTERED BY	E. WALGAMOTT					CONTRACT NO.													
CHECKED BY	Y. KUANG																		
PROJ. ENGR.	C. ANDERSON																		
REGIONAL ADM.	B. NIELSEN																		
REVISION						DATE	BY												
										DATE		DATE							
										P.E. STAMP BOX		P.E. STAMP BOX							

## SUMMARY OF QUANTITIES

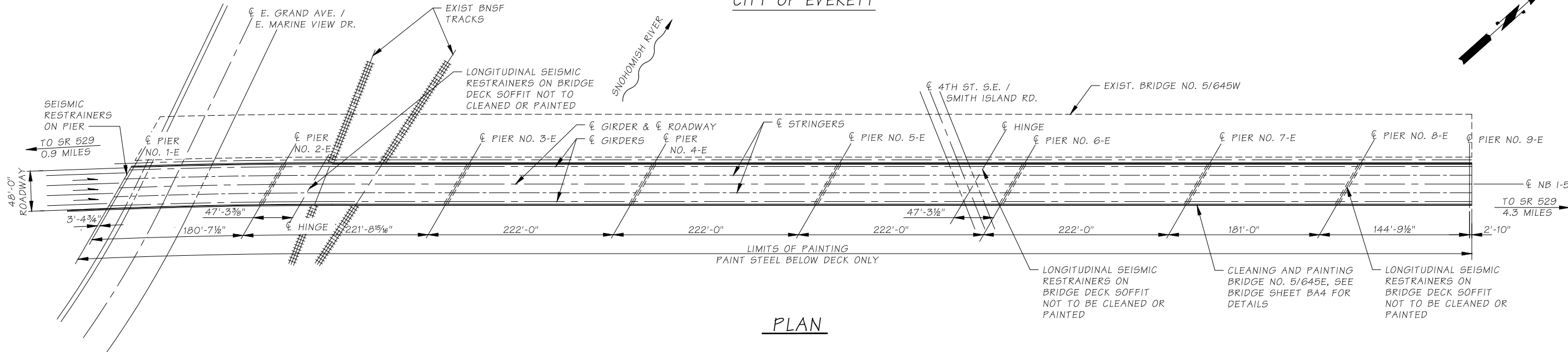
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	2	005	312012	**	FEDERAL
	3	005	312012	**	STATE

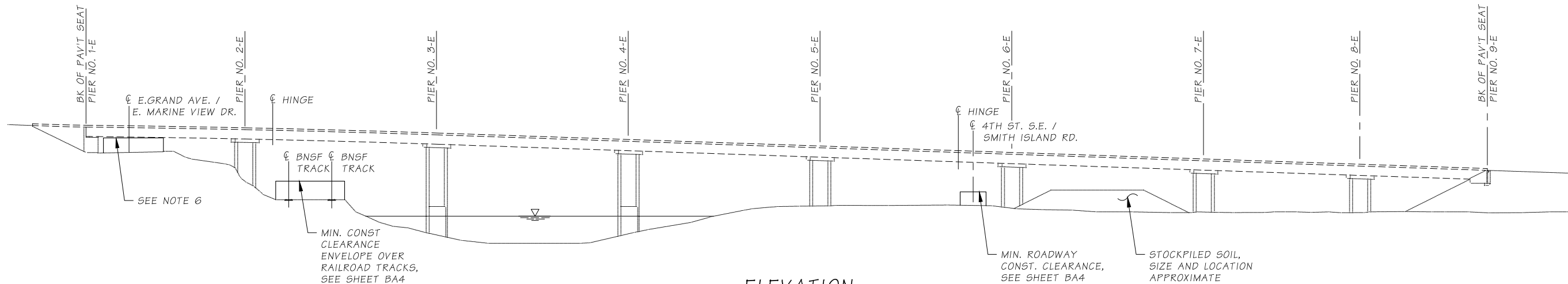
08/01/22		EJW	REGION	STATE	FEDERAL AID PROJECT. NO.	Washington State Department of Transportation	I-5 SNOHOMISH RIVER BRIDGE (BN RR) PAINTING	SQ1
			10	WA	0055(254)			
			JOB NUMBER		SUMMARY OF QUANTITIES			SHEET 3 OF 20 SHEETS
			22A035/6					
			CONTRACT NO					
DATE	REVISION	BY	000000					

FILE NAME T:\412348\XL6330 - I-5 Sno R Br Painting\CAD\ContractPlans\XL6330_PS_NTS.dgn										 <p>Washington State Department of Transportation</p>		<p>I-5 SNOHOMISH RIVER BRIDGE (BN RR) PAINTING</p> <p>NO TRESPASSING SIGN</p>		Plot 6
TIME	4:29:34 PM				REGION NO.	STATE	FED.AID PROJ.NO.	PLAN REF NO						
DATE	11/14/2022				10	WASH		NTS1						
PLOTTED BY	walgame				JOB NUMBER									
DESIGNED BY	E. WALGAMOTT				22A035									
ENTERED BY	E. WALGAMOTT				CONTRACT NO.									
CHECKED BY	Y. KUANG				LOCATION NO.									
PROJ. ENGR.	C. ANDERSON													
REGIONAL ADM.	B. NIELSEN													
		REVISION	DATE	BY										





PLAN



ELEVATION

GENERAL NOTES

1. ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION DATED 2023.
2. EXISTING FEATURES AND DIMENSIONS SHOWN ARE BASED ON THE INSPECTION REPORTS AND ORIGINAL DESIGN PLANS. ALL RELEVANT DETAILS AND DIMENSIONS SHALL BE FIELD MEASURED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS AND PROCEEDING WITH CONSTRUCTION.
3. REMOVED PAINT, DEBRIS AND SPENT ABRASIVE BLAST MEDIA SHALL BE COLLECTED AND REMOVED FROM THE BRIDGE DAILY, AT A MINIMUM, AND SHALL NOT EXCEED THE ALLOWED TEMPORARY CONSTRUCTION LOADS AT ANY TIME.
4. PAINTING SHALL BE COMPLETED IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 6-07.
5. UNLESS NOTED OTHERWISE, ALL EXISTING STEEL SURFACES REQUIRE FULL PAINT REMOVAL PRIOR TO APPLYING NEW PAINT SYSTEM. SEE STD SPECIFICATION 6-07.3(10)E FOR SURFACE PREPARATION.
6. MAINTAIN EXISTING VERTICAL CLEARANCE OVER LIVE TRAFFIC LANES. SEE TRAFFIC CONTROL PLANS FOR LANE CLOSURE OPTIONS.

BRIDGE PAINTING

Bridge Design Engr. B. Khaleghi				REGION NO.	STATE	FED AID PROJ NO
Supervisor				10	WASH	
Designed By B. Lindstrom	11/02/2022			JOB NUMBER		
Checked By A. Olson	11/02/2022			22A035		
Detailed By R. Torgeson	11/02/2022					
Bridge Projects Engr. M. Rosa						
Prelim. Plan By						
Architect/Specialist	DATE	REVISION	BY			

BRIDGE  
AND  
STRUCTURES  
OFFICE





Washington State  
Department of Transportation



1601 5th Avenue, Suite 1600  
Seattle, WA 98101  
206.622.5822  
www.kpff.com

I-5  
SNOHOMISH RIVER BRIDGE (BN RR)  
PAINTING  
BRIDGE NO. 5/645E  
LAYOUT

BRIDGE SHEET NO.	BA1
SHEET	5
OF	20
SHEETS	

Rick Torgeson on: 11/15/2022 9:18 AM File: V:\2200223 (Snohomish River Bridge Painting)\02\_Design (v2019)\SRB-BA02.DWG  
SR JOB NO. SHEET

LEGEND

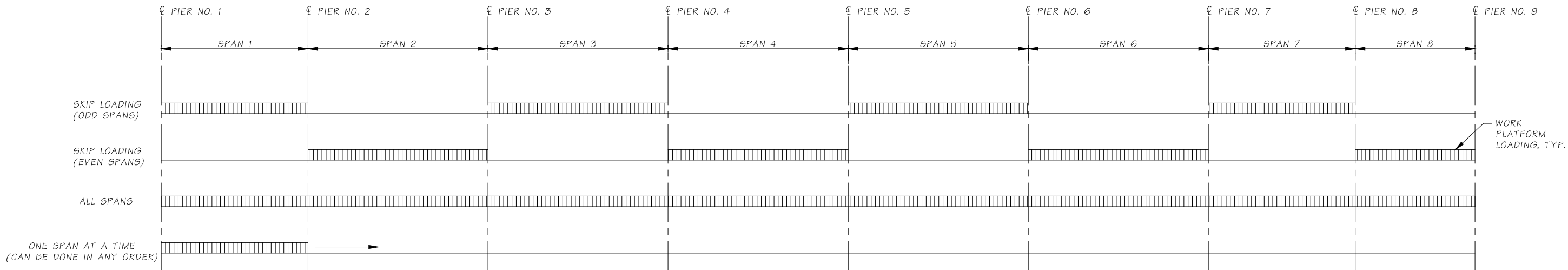
- CL CENTERLINE  
Ø DIAMETER  
PL PLATE

ABBREVIATIONS

- AASHTO AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS  
AB. RESIN BONDED ANCHOR  
ASTM AMERICAN STANDARDS FOR TESTING AND MATERIALS  
CONST. CONSTRUCTION  
EQ. EQUAL  
EXIST. EXISTING  
HORIZ. HORIZONTAL  
LBS. POUNDS  
MAX. MAXIMUM  
MIN. MINIMUM  
NO. NUMBER  
O.C. ON CENTER  
OPP. OPPOSITE  
PLF POUNDS PER LINEAL FOOT  
PSF POUNDS PER SQUARE FOOT  
SHT. SHEET  
SPA. SPACE  
STD. STANDARD  
STL. STEEL  
SYM. SYMMETRICAL  
TYP. TYPICAL  
VERT. VERTICAL  
WSDOT WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

CONSTRUCTION LOADING NOTES FOR BRIDGE SPANS

1. TEMPORARY BELOW DECK WORK PLATFORM:
- A. THE CONTRACTOR MAY SUPPORT A TEMPORARY BELOW-DECK WORK PLATFORM FROM THE BRIDGE SPAN. THE PLATFORM MAY EXTEND FROM PIER TO PIER. THE WIDTH OF THE PLATFORM SHALL NOT EXCEED THE OUT-TO-OUT WIDTH OF THE EXTERIOR GIRDER CENTERLINES PLUS 5-FEET ON BOTH SIDES.
- B. THE BELOW DECK WORK PLATFORM SHALL BE CONFIGURED AS SHOWN IN THE TYPICAL SECTION ON SHEET BA4.
- C. THE TOTAL WEIGHT OF THE PLATFORM (SELF-WEIGHT PLUS IMPOSED LOADS) SHALL NOT EXCEED 25 PSF.
- D. THE PLATFORM SHALL BE SUSPENDED FROM THE GIRDER BOTTOM FLANGE OF ALL THREE GIRDERS. THE MAXIMUM CONSTRUCTION LOAD SHALL BE 0.465 KLF FOR THE EXTERIOR GIRDERS, AND 0.630 KLF FOR THE INTERIOR GIRDERS. ATTACHMENTS TO THE CROSS FRAMES, FLOOR TRUSSES, STRINGERS OR BRACING IS NOT ALLOWED. THE MAXIMUM WORK PLATFORM HANGER SPACING SHALL BE 12 FEET ALONG THE CENTERLINE OF THE GIRDER.
2. THE MAXIMUM REACTION AT ANY ATTACHMENT POINT SHALL NOT EXCEED 6,500 POUNDS.
3. ATTACHMENT TO THE BRIDGE SHALL BE MADE WITH CLAMP OR PADDED WRAP TYPE CONNECTORS. HOLES SHALL NOT BE MADE IN BRIDGE MEMBERS. NO WELDING TO BRIDGE MEMBERS IS ALLOWED. METHODS OF ATTACHMENT TO THE BRIDGE SHALL BE SUBMITTED IN ACCORDANCE WITH THE STANDARD SPECIFICATION SECTION 6-07.3(2)F.
4. WORKING DRAWINGS AND CALCULATIONS (TYPE 2E) SHALL BE SUBMITTED IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 1-05.3. WORKING DRAWINGS AND CALCULATIONS SHALL SHOW THAT ALL OF THE ABOVE CONSTRAINTS HAVE BEEN MET FOR ALL CONSTRUCTION LOADS. CONSTRUCTION LOADS SHALL NOT BE PLACED ON THE BRIDGE UNTIL THE ASSOCIATED WORKING DRAWINGS AND CALCULATIONS HAVE BEEN REVIEWED AND ACCEPTED BY WSDOT.
5. THE EXISTING BRIDGES HAVE BEEN CHECKED FOR THE LOADING PATTERNS SHOWN IN THE DIAGRAMS ON THIS SHEET AND THE LOADS LISTED ABOVE. FOR ANY OTHER LOADING PATTERN, THE CONTRACTOR SHALL SUBMIT THE LOADING PATTERN TO WSDOT FOR REVIEW AND APPROVAL PRIOR TO APPLYING THE LOADS.



WORK PLATFORM LOADING DIAGRAM

THE LOADING PATTERN SHOWN ABOVE IS BASED ON THE LOADING DESCRIBED ON THIS SHEET AND THE BELOW DECK PLATFORM LIMITS SHOWN ON BA4.

Bridge Design Engr. B. Khaleghi				REGION NO.	STATE	FED AID PROJ NO
Supervisor				10	WASH	
Designed By B. Lindstrom 11/02/2022				JOB NUMBER 22A035		
Checked By A. Olson 11/02/2022						
Detailed By R. Torgeson 11/02/2022						
Bridge Projects Engr. M. Rosa						
Prelim. Plan By						
Architect/Specialist	DATE	REVISION	BY			

BRIDGE  
AND  
STRUCTURES  
OFFICE



I-5 SNOHOMISH RIVER BRIDGE (BN RR) PAINTING BRIDGE NO. 5/645E	BRIDGE SHEET NO. BA2
CONSTRUCTION LOADING NOTES	SHEET 6 OF 20 SHEETS

Rick Torgeson on: 11/15/2022 9:19 AM File: V:\2200223 (Snohomish River Bridge Painting)\02\_Design (v2019)\SRB-BA03.DWG  
SR JOB NO. SHEET

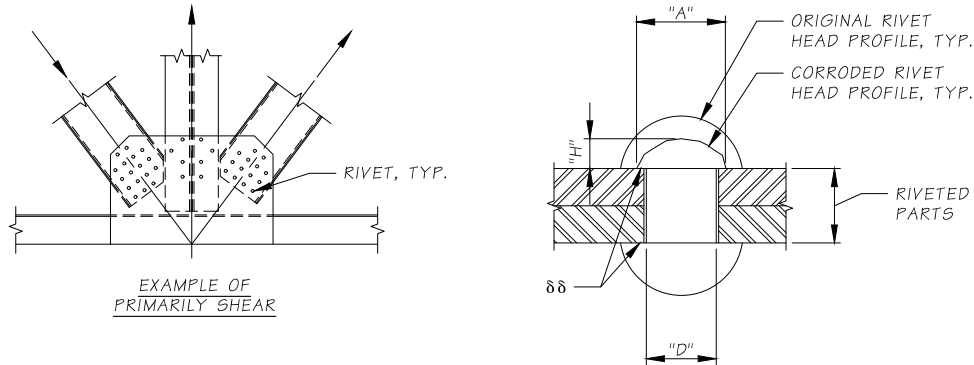
RIVET INSPECTION AND REPLACEMENT NOTES:

- EXISTING RIVETS SHALL BE EVALUATED AFTER ABRASIVE BLASTING AND PRIMING OPERATIONS ARE COMPLETED AND SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH THE RIVET EVALUATION CRITERIA SHOWN ON THIS SHEET. NEW H.S. BOLTS SHALL BE INSTALLED AND TENSIONED IN ACCORDANCE WITH SECTION 6-03.3(33). AND PREPARED FOR PAINT IN ACCORDANCE WITH SECTION 6-07.3(11)A. EXISTING HOLES MAY BE REAMED TO RIVET DIAMETER +1/8" MAXIMUM TO FACILITATE BOLT INSTALLATION IF NEEDED.
- PRIOR TO STARTING ANY RIVET REMOVAL, THE CONTRACTOR SHALL SUBMIT A TYPE 2 WORKING DRAWING DETAILING PROPOSED RIVET REMOVAL METHODS TO THE ENGINEER. ACCEPTANCE WILL REQUIRE DEMONSTRATIONS BY THE CONTRACTOR TO ENSURE NO DAMAGE WILL OCCUR TO EXISTING MEMBER TO REMAIN. NO FLAME CUTTING METHODS WILL BE PERMITTED.
- BOLTS SHALL CONFORM TO ASTM F3125 GR A325 AND SHALL BE GALVANIZED. BOLTS REPLACING RIVETS SHALL HAVE A DIAMETER MATCHING THE DIAMETER OF THE RIVET THEY REPLACE. THREADS SHALL BE EXCLUDED FROM THE SHEAR PLANES.
- AT ANY CONNECTION, ONLY ONE RIVET MAY BE REMOVED AND REPLACED AT A TIME. THE REPLACEMENT BOLT SHALL BE FULLY INSTALLED AND TIGHTENED BEFORE THE NEXT RIVET MAY BE REMOVED.

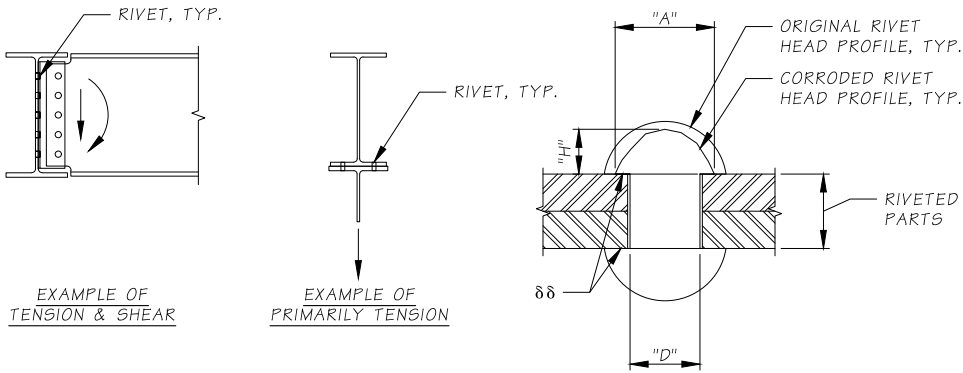
RIVET EVALUATION CRITERIA:

RIVETS SHALL BE REPLACED IF THEY FAIL TO MEET ANY ONE OF THESE CRITERIA.

- REPLACE RIVET IF THERE IS SEPARATION BETWEEN THE SOUND METAL SURFACES OF EITHER RIVET HEAD AND THE RIVETED PARTS. (SEE SYMBOL  $\delta\delta$ )
- REPLACE RIVET IF THE RIVET VISUALLY APPEARS TO BE LOOSE FOR ANY REASON. RIVETS VISUALLY SUSPECT OF BEING LOOSE SHALL BE CONFIRMED LOOSE IF IT CAN BE FELT TO MOVE AFTER BEING STRUCK ON THE SIDE OF THE HEAD IN A DIRECTION APPROXIMATELY PERPENDICULAR TO ITS SHANK WITH A 40 OZ HAMMER.
- REPLACE RIVET IF SECTION LOSS IS EQUAL TO OR GREATER THAN THE DIAGRAM SHOWN ON THIS SHEET. THE ENGINEER SHALL BE CONSULTED IF UNCLEAR AS TO THE RIVET LOADING CONDITION OR USE THE SECTION LOSS CRITERIA FOR "UNKNOWN" LOADING CONDITION. FOR RIVETS WITH IRREGULAR SECTION LOSS, CONTACT THE ENGINEER FOR DIRECTION.



RIVET LOADING CONDITION - PRIMARILY SHEAR



RIVET LOADING CONDITION  
PRIMARILY TENSION, TENSION & SHEAR, OR UNKNOWN

MINIMUM RIVET DIMENSIONS				
RIVET SHANK DIAMETER "D"	LOADING: PRIMARILY SHEAR		LOADING: TENSION & SHEAR, TENSION OR UNKNOWN	
	MINIMUM HEAD DIAMETER "A"	MINIMUM HEAD HEIGHT "A"	MINIMUM HEAD DIAMETER "A"	MINIMUM HEAD HEIGHT "A"
5/8"	7/8"	3/16"	1"	3/8"
3/4"	1"	1/4"	1 1/8"	7/16"
7/8"	1 1/8"	3/8"	1 1/4"	9/16"

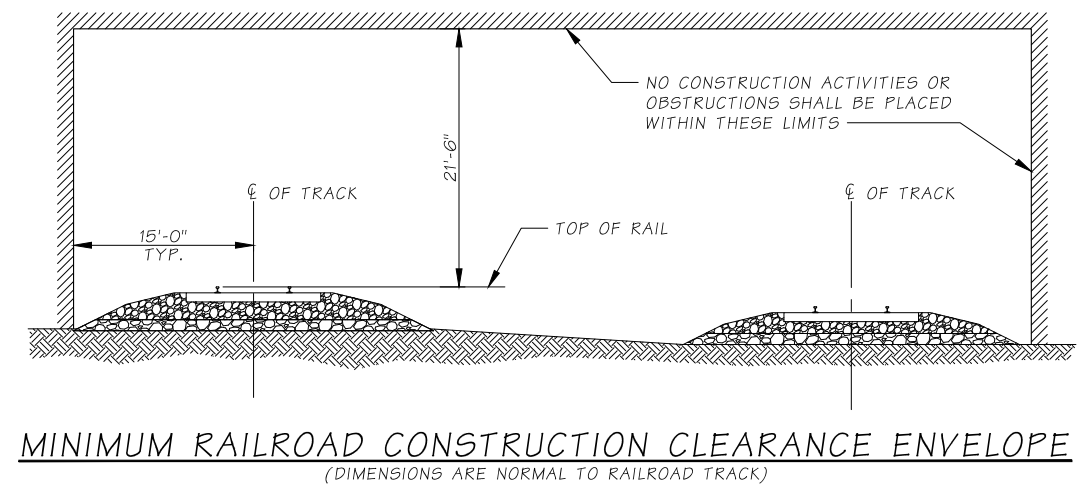
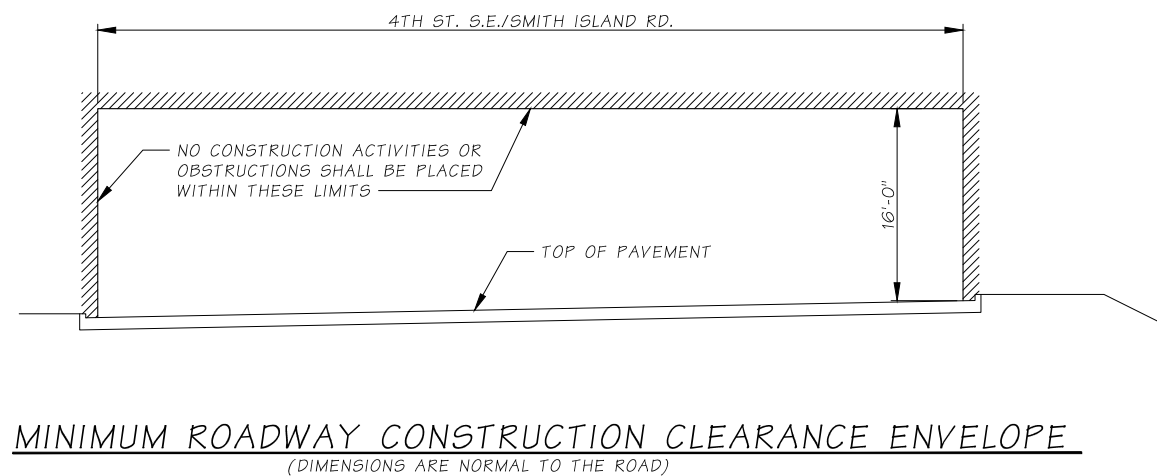
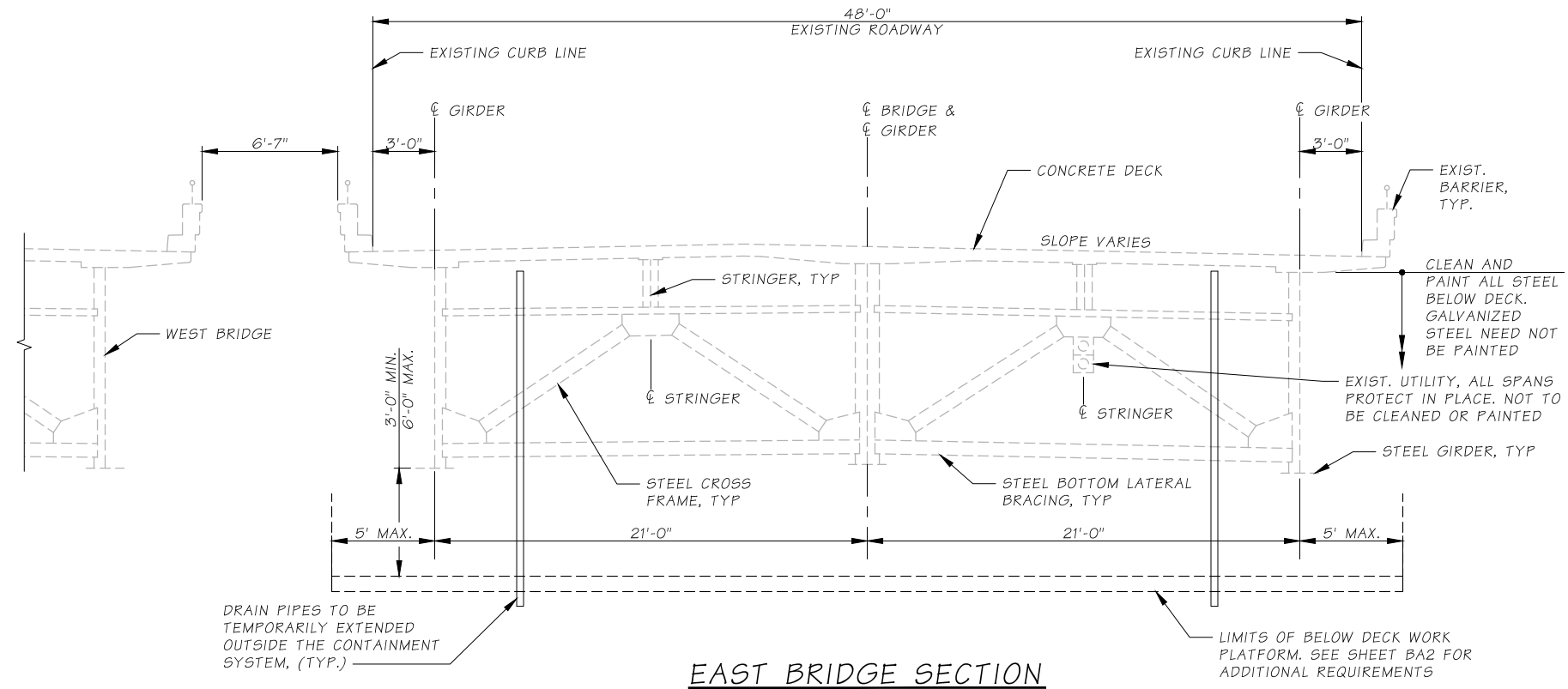
Bridge Design Engr. B. Khaleghi				REGION NO.	STATE	FED AID PROJ NO
Supervisor				10	WASH	
Designed By B. Lindstrom 11/02/2022				JOB NUMBER 22A035		
Checked By A. Olson 11/02/2022						
Detailed By R. Torgeson 11/02/2022						
Bridge Projects Engr. M. Rosa						
Prelim. Plan By						
Architect/Specialist	DATE	REVISION	BY			

BRIDGE  
AND  
STRUCTURES  
OFFICE



I-5 SNOHOMISH RIVER BRIDGE (BN RR) PAINTING BRIDGE NO. 5/645E	
RIVET EVALUATION CRITERIA	

BRIDGE SHEET NO. BA3
SHEET 7 OF 20 SHEETS



Rick Torgeson on: 11/15/2022 9:20 AM File: V:\2200223 (Snohomish River Bridge Painting)\02\_Design (v2019)\SRB-BA04.DWG SR JOB NO. SHEET

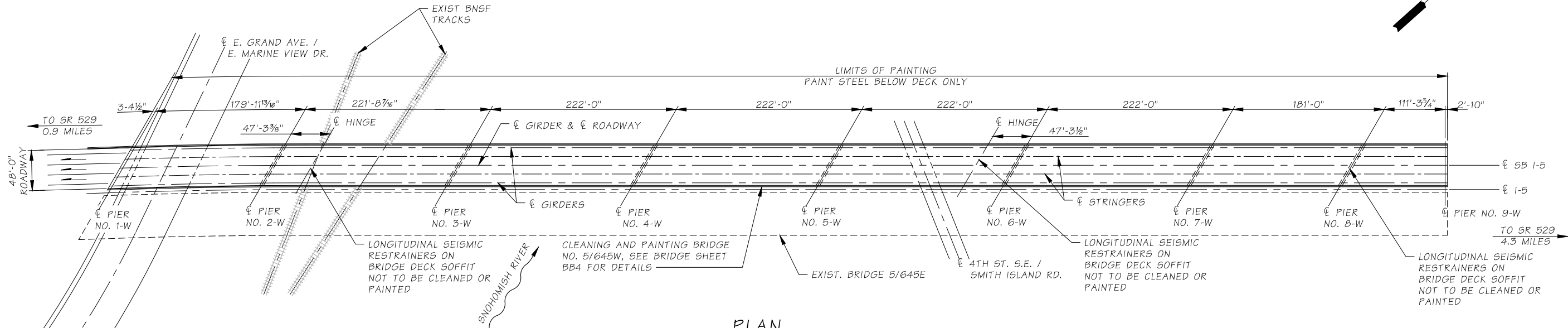
Bridge Design Engr. B. Khaleghi				REGION NO.	STATE	FED AID PROJ NO
Supervisor				10	WASH	
Designed By B. Lindstrom 11/02/2022				JOB NUMBER		
Checked By A. Olson 11/02/2022				22A035		
Detailed By R. Torgeson 11/02/2022						
Bridge Projects Engr. M. Rosa						
Prelim. Plan By						
Architect/Specialist	DATE	REVISION	BY			

BRIDGE  
AND  
STRUCTURES  
OFFICE

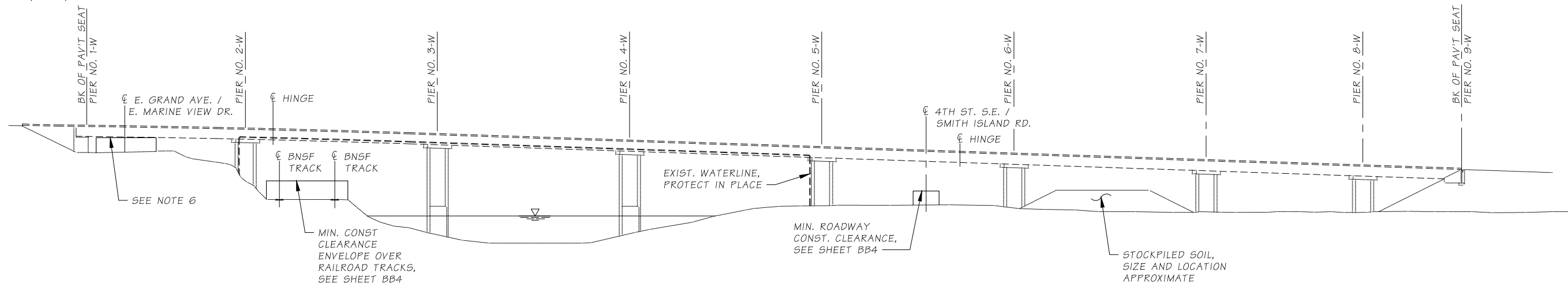


I-5  
SNOHOMISH RIVER BRIDGE (BN RR)  
PAINTING  
BRIDGE NO. 5/645E  
TYPICAL BRIDGE SECTIONS AND  
CLEARANCE ENVELOPES

BRIDGE  
SHEET  
NO.  
BA4  
SHEET  
8  
OF  
20  
SHEETS



PLAN





ELEVATION

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BRIDGE PAINTING

Bridge Design Engr. <i>B. Khaleghi</i>						REGION NO.	STATE	FED AID PROJ NO	<div>BRIDGE AND STRUCTURES OFFICE</div> <div></div> <div><div>1601 5th Avenue, Suite 1600 Seattle, WA 98101 206.622.5822 <a href="http://www.kpff.com">www.kpff.com</a></div></div>	I-5 SNOHOMISH RIVER BRIDGE (BN RR) PAINTING BRIDGE NO. 5/645W		BRIDGE SHEET NO. <i>BB1</i>
Supervisor						10	WASH					SHEET 9 OF 20 SHEETS
Designed By	<i>B. Lindstrom</i>	<i>11/02/2022</i>										
Checked By	<i>A. Olson</i>	<i>11/02/2022</i>										
Detailed By	<i>R. Torgeson</i>	<i>11/02/2022</i>										
Bridge Projects Engr. <i>M. Rosa</i>						JOB NUMBER <i>22A035</i>						
Prelim. Plan By												
Architect/Specialist	DATE	REVISION	BY									

Rick Torgeson on: 11/15/2022 9:22 AM File: V:\2200223 (Snohomish River Bridge Painting)\02\_Design (v2019)\SRB-BB02.DWG  
SR JOB NO. SHEET

LEGEND

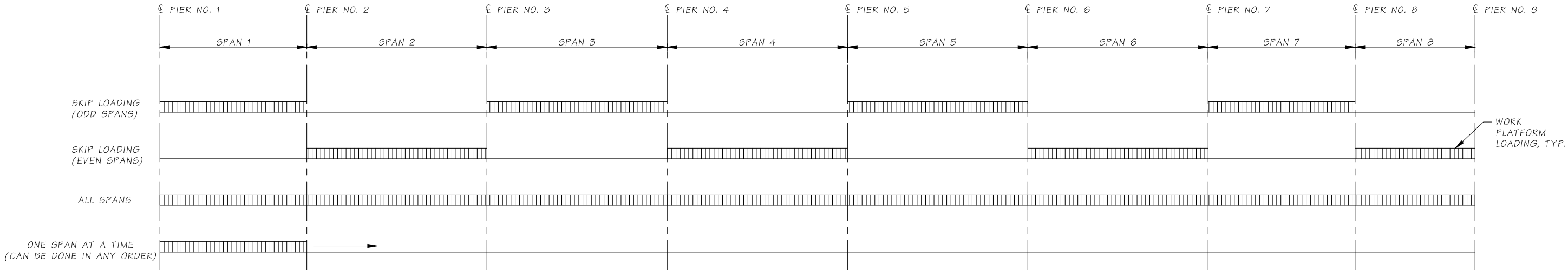
- CL CENTERLINE  
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ABBREVIATIONS

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LBS. POUNDS  
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NO. NUMBER  
O.C. ON CENTER  
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PLF POUNDS PER LINEAL FOOT  
PSF POUNDS PER SQUARE FOOT  
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SPA. SPACE  
STD. STANDARD  
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SYM. SYMMETRICAL  
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WSDOT WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

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- C. THE TOTAL WEIGHT OF THE PLATFORM (SELF-WEIGHT PLUS IMPOSED LOADS) SHALL NOT EXCEED 25 PSF.
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WORK PLATFORM LOADING DIAGRAM

THE LOADING PATTERN SHOWN ABOVE IS BASED ON THE LOADING DESCRIBED ON THIS SHEET AND THE BELOW DECK PLATFORM LIMITS SHOWN ON BB4.

Bridge Design Engr. B. Khaleghi				REGION NO.	STATE	FED AID PROJ NO
Supervisor				10	WASH	
Designed By B. Lindstrom 11/02/2022						
Checked By A. Olson 11/02/2022						
Detailed By R. Torgeson 11/02/2022				JOB NUMBER		
Bridge Projects Engr. M. Rosa				22A035		
Prelim. Plan By						
Architect/Specialist	DATE	REVISION	BY			

BRIDGE  
AND  
STRUCTURES  
OFFICE



I-5 SNOHOMISH RIVER BRIDGE (BN RR) PAINTING BRIDGE NO. 5/645W	BRIDGE SHEET NO. BB2
CONSTRUCTION LOADING NOTES	SHEET 10 OF 20 SHEETS

Rick Torgeson on: 11/15/2022 9:23 AM File: V:\2200223 (Snohomish River Bridge Painting)\02\_Design (v2019)\SRB-BB03.DWG  
SR JOB NO. SHEET

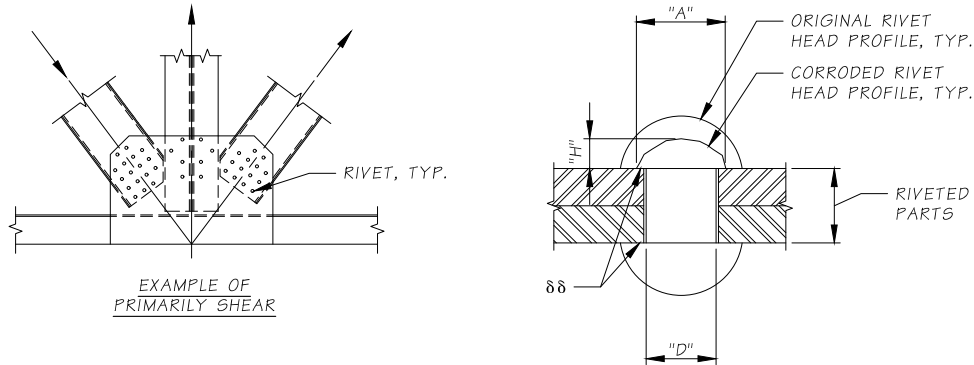
RIVET INSPECTION AND REPLACEMENT NOTES:

- EXISTING RIVETS SHALL BE EVALUATED AFTER ABRASIVE BLASTING AND PRIMING OPERATIONS ARE COMPLETED AND SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH THE RIVET EVALUATION CRITERIA SHOWN ON THIS SHEET. NEW H.S. BOLTS SHALL BE INSTALLED AND TENSIONED IN ACCORDANCE WITH SECTION 6-03.3(33). AND PREPARED FOR PAINT IN ACCORDANCE WITH SECTION 6-07.3(11)A. EXISTING HOLES MAY BE REAMED TO RIVET DIAMETER + $\frac{1}{8}$ " MAXIMUM TO FACILITATE BOLT INSTALLATION IF NEEDED.
- PRIOR TO STARTING ANY RIVET REMOVAL, THE CONTRACTOR SHALL SUBMIT A TYPE 2 WORKING DRAWING DETAILING PROPOSED RIVET REMOVAL METHODS TO THE ENGINEER. ACCEPTANCE WILL REQUIRE DEMONSTRATIONS BY THE CONTRACTOR TO ENSURE NO DAMAGE WILL OCCUR TO EXISTING MEMBER TO REMAIN. NO FLAME CUTTING METHODS WILL BE PERMITTED.
- BOLTS SHALL CONFORM TO ASTM F3125 GR A325 AND SHALL BE GALVANIZED. BOLTS REPLACING RIVETS SHALL HAVE A DIAMETER MATCHING THE DIAMETER OF THE RIVET THEY REPLACE. THREADS SHALL BE EXCLUDED FROM THE SHEAR PLANES.
- AT ANY CONNECTION, ONLY ONE RIVET MAY BE REMOVED AND REPLACED AT A TIME. THE REPLACEMENT BOLT SHALL BE FULLY INSTALLED AND TIGHTENED BEFORE THE NEXT RIVET MAY BE REMOVED.

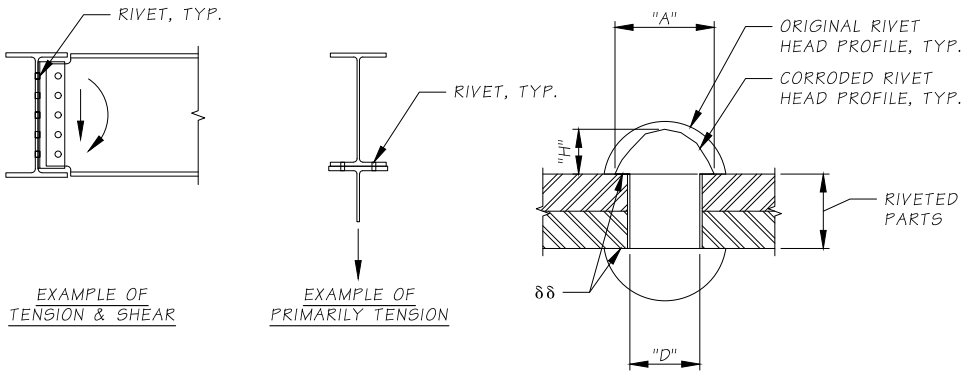
RIVET EVALUATION CRITERIA:

RIVETS SHALL BE REPLACED IF THEY FAIL TO MEET ANY ONE OF THESE CRITERIA.

- REPLACE RIVET IF THERE IS SEPARATION BETWEEN THE SOUND METAL SURFACES OF EITHER RIVET HEAD AND THE RIVETED PARTS. (SEE SYMBOL  $\delta\delta$ )
- REPLACE RIVET IF THE RIVET VISUALLY APPEARS TO BE LOOSE FOR ANY REASON. RIVETS VISUALLY SUSPECT OF BEING LOOSE SHALL BE CONFIRMED LOOSE IF IT CAN BE FELT TO MOVE AFTER BEING STRUCK ON THE SIDE OF THE HEAD IN A DIRECTION APPROXIMATELY PERPENDICULAR TO ITS SHANK WITH A 40 OZ HAMMER.
- REPLACE RIVET IF SECTION LOSS IS EQUAL TO OR GREATER THAN THE DIAGRAM SHOWN ON THIS SHEET. THE ENGINEER SHALL BE CONSULTED IF UNCLEAR AS TO THE RIVET LOADING CONDITION OR USE THE SECTION LOSS CRITERIA FOR "UNKNOWN" LOADING CONDITION. FOR RIVETS WITH IRREGULAR SECTION LOSS, CONTACT THE ENGINEER FOR DIRECTION.



RIVET LOADING CONDITION - PRIMARILY SHEAR



RIVET LOADING CONDITION  
PRIMARILY TENSION, TENSION & SHEAR, OR UNKNOWN

MINIMUM RIVET DIMENSIONS				
RIVET SHANK DIAMETER "D"	LOADING: PRIMARILY SHEAR		LOADING: TENSION & SHEAR, TENSION OR UNKNOWN	
	MINIMUM HEAD DIAMETER "A"	MINIMUM HEAD HEIGHT "A"	MINIMUM HEAD DIAMETER "A"	MINIMUM HEAD HEIGHT "A"
$\frac{5}{8}$ "	$\frac{7}{8}$ "	$\frac{3}{16}$ "	1"	$\frac{3}{8}$ "
$\frac{3}{4}$ "	1"	$\frac{1}{4}$ "	$1\frac{1}{8}$ "	$\frac{7}{16}$ "
$\frac{7}{8}$ "	$1\frac{1}{8}$ "	$\frac{3}{8}$ "	$1\frac{1}{4}$ "	$\frac{9}{16}$ "

Bridge Design Engr. B. Khaleghi				REGION NO.	STATE	FED AID PROJ NO
Supervisor				10	WASH	
Designed By B. Lindstrom 11/02/2022						
Checked By A. Olson 11/02/2022				JOB NUMBER 22A035		
Detailed By R. Torgeson 11/02/2022						
Bridge Projects Engr. M. Rosa						
Prelim. Plan By						
Architect/Specialist	DATE	REVISION	BY			

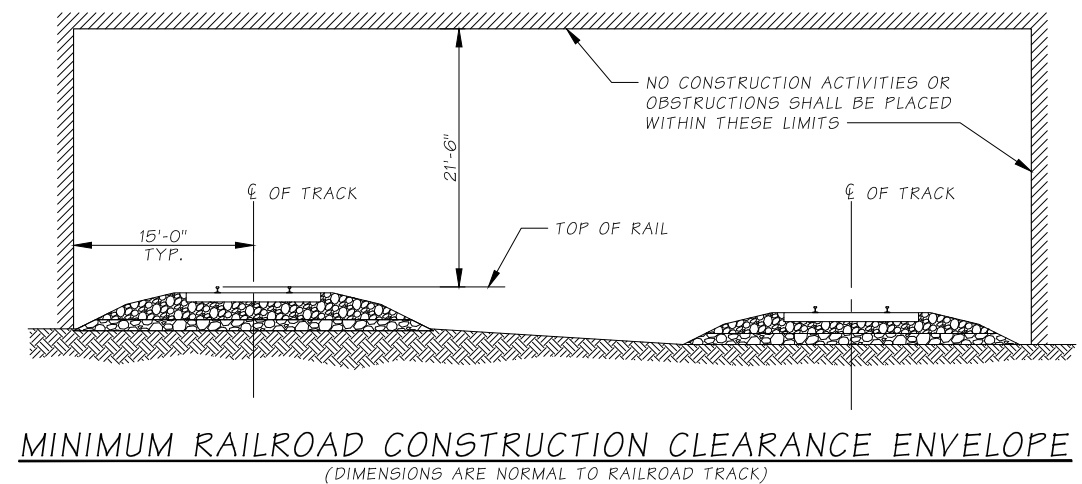
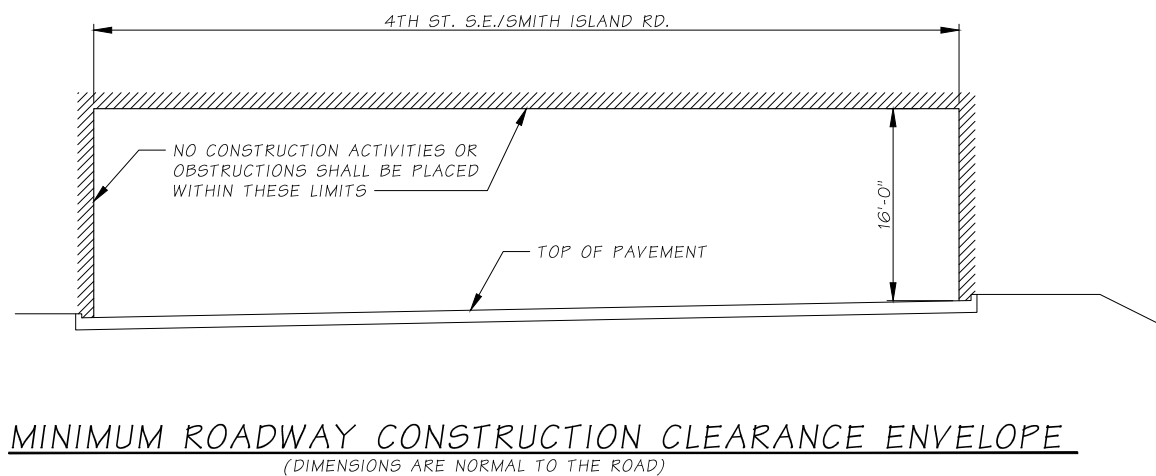
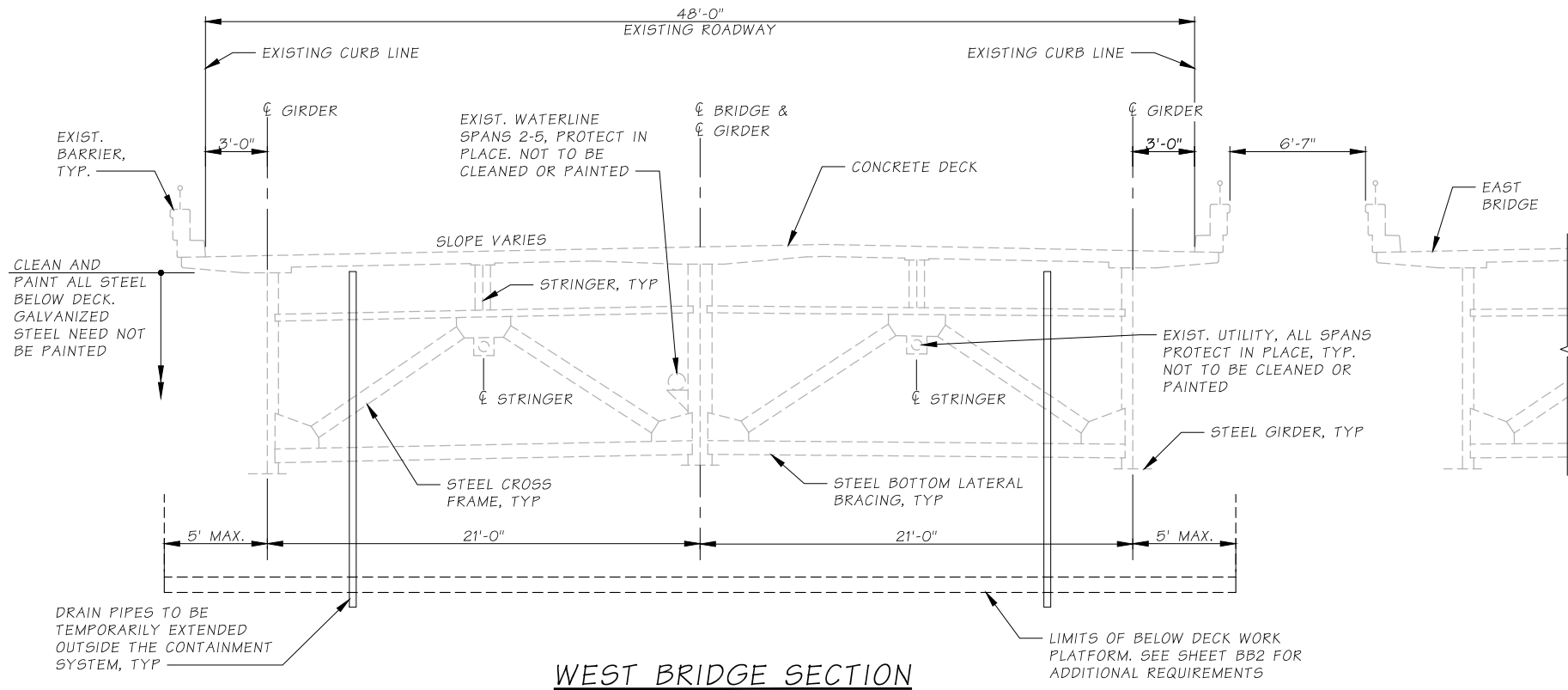
BRIDGE  
AND  
STRUCTURES  
OFFICE



I-5  
SNOHOMISH RIVER BRIDGE (BN RR)  
PAINTING  
BRIDGE NO. 5/645W

RIVET EVALUATION CRITERIA

BRIDGE  
SHEET  
NO.  
BB3  
SHEET  
11  
OF  
20  
SHEETS



Rick Torgeson on: 11/15/2022 9:24 AM File: V:\220223 (Snohomish River Bridge Painting)\02\_Design (v2019)\SRB-BB04.DWG SR JOB NO. SHEET

Bridge Design Engr. B. Khaleghi				REGION NO.	STATE	FED AID PROJ NO
Supervisor				10	WASH	
Designed By B. Lindstrom 11/02/2022				JOB NUMBER		
Checked By A. Olson 11/02/2022				22A035		
Detailed By R. Torgeson 11/02/2022						
Bridge Projects Engr. M. Rosa						
Prelim. Plan By						
Architect/Specialist	DATE	REVISION	BY			

BRIDGE  
AND  
STRUCTURES  
OFFICE



**I-5  
SNOHOMISH RIVER BRIDGE (BN RR)  
PAINTING  
BRIDGE NO. 5/645W  
TYPICAL BRIDGE SECTIONS AND  
CLEARANCE ENVELOPES**

BRIDGE  
SHEET  
NO.  
**BB4**  
SHEET  
12  
OF  
20  
SHEETS







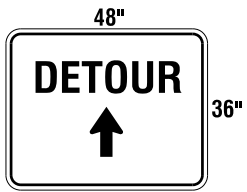




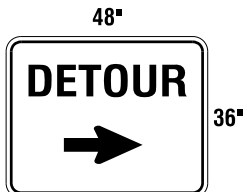




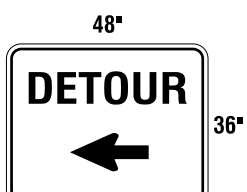




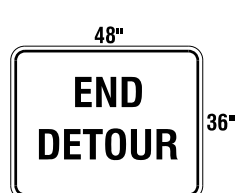
M4-9



M4-9R











M4-9L



M4-9(MOD)



LEGEND

- DETOUR ROUTE 
- DETOUR DIRECTION 
- CONSTRUCTION SIGN CLASS A 
- CLASS B SIGN 
- DETOUR NOTE SEE SHEET DT1 
- PORTABLE CHANGEABLE MESSAGE SIGN 
- ROAD CLOSURE 
- BRIDGE 

FILE NAME T:\412348\XL6330 - I-5 Sno R Br Painting\CAD\ContractPlans\XL6330\_PS\_DT ew.dgn

TIME 7:43:55 AM

DATE 11/16/2022

PLOTTED BY walgame

DESIGNED BY E. WALGAMOTT

ENTERED BY E. WALGAMOTT

CHECKED BY Y. KUANG

PROJ. ENGR. C. ANDERSON

REGIONAL ADM. B. NIELSEN

REVISION

DATE

BY

REGION NO. 10

STATE WASH

JOB NUMBER 22A035

CONTRACT NO.

FED.AID PROJ.NO.

LOCATION NO.

P.E. STAMP BOX

DATE

P.E. STAMP BOX

DATE



Washington State  
Department of Transportation

I-5  
SNOHOMISH RIVER BRIDGE (BN RR)  
PAINTING

DETOUR PLAN

Plot 6

PLAN REF NO

DT1

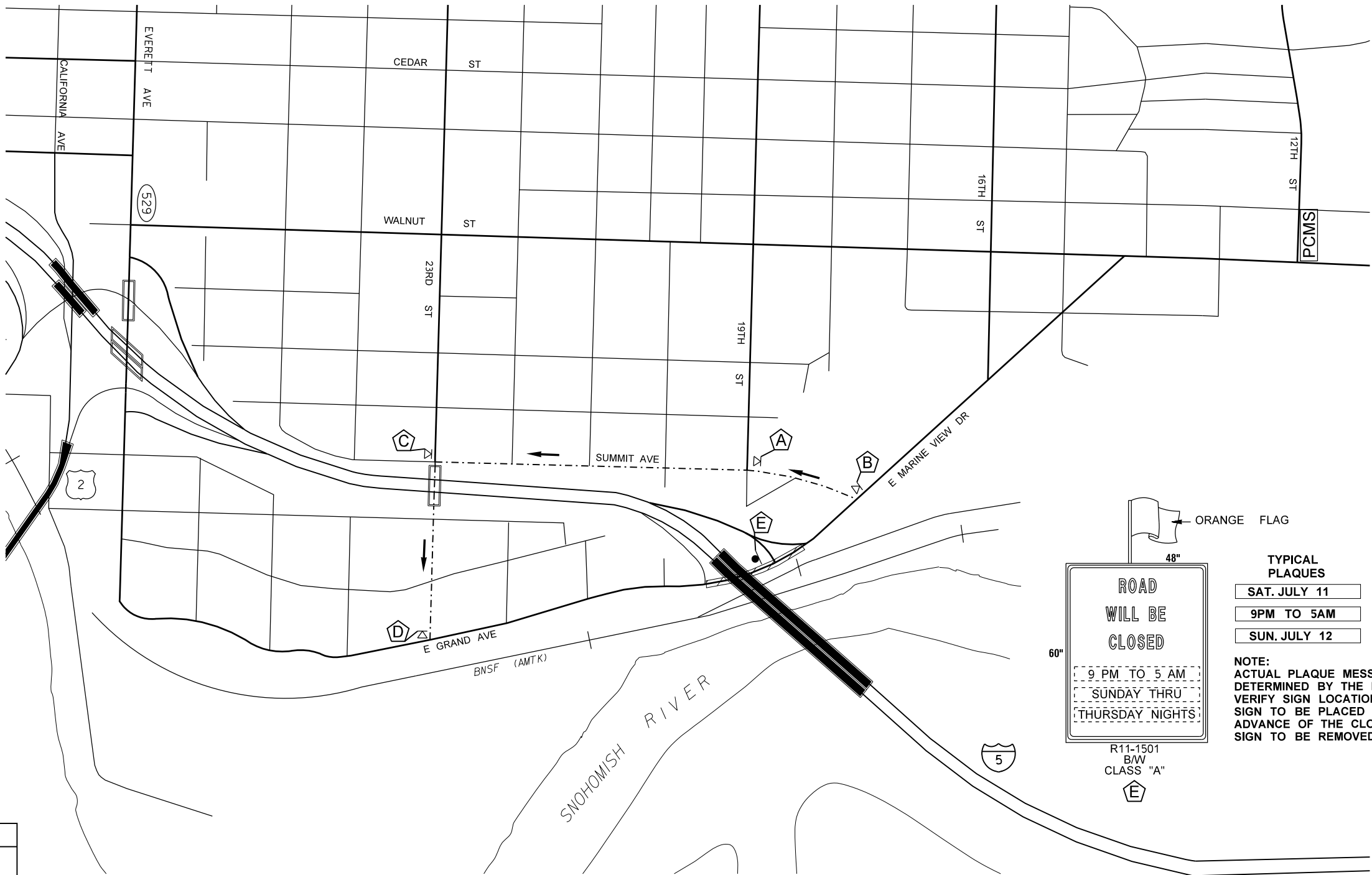
SHEET

20

OF

20

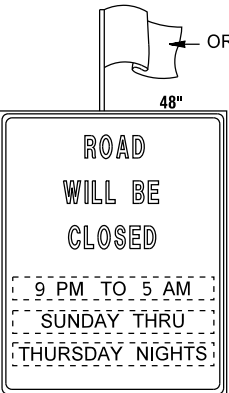
SHEETS



PCMS	
1	2
ROAD CLOSED AHEAD	I-5 ON RAMP OPEN
2.0 SEC	2.0 SEC

FIELD LOCATE 0.5 +/- MILES PRIOR TO DETOUR.

LOCATE PCMS PER WSDOT STANDARD SPEC. 1-10.3(3)C.



R11-1501  
B/W  
CLASS "A"



ORANGE FLAG

TYPICAL PLAQUES

SAT. JULY 11

9PM TO 5AM

SUN. JULY 12

NOTE:

ACTUAL PLAQUE MESSAGE TO BE DETERMINED BY THE ENGINEER. VERIFY SIGN LOCATION WITH ENGINEER. SIGN TO BE PLACED FIVE DAYS IN ADVANCE OF THE CLOSURE. SIGN TO BE REMOVED DURING CLOSURE.

NOT TO SCALE

NOTES:

1. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL SIGNING

**E MARINE VIEW DR SOUTHBOUND CLOSURE  
SUMMIT AVE TO 20TH ST**